

### **IN THE DRAWINGS**

Please enter the attached *Replacement Sheet* for originally-filed FIG. 5. Applicant respectfully asserts that the FIG. 5 in the *Replacement Sheet* does not add new matter to the *Application*. Support for the drogue anchor (26a) added in FIG. 5 can be found at least in ¶ 0068 of the *Specification* as published.

## **REMARKS**

As of the 19 June 2007 *Office Action*, Claims 17-32 are pending in the *Application*. In the *Office Action*, the Examiner rejects Claims 17-32. Applicant thanks the Examiner with appreciation for the careful examination given to the *Application*. By this *Response*, Applicant amends certain claims to clarify some currently claimed embodiments. No new matter is believed introduced in this submission as at least FIGS. 3 and 4 of Applicant's *Drawings* fully supports the clarifying amendments.

Applicant submits this *Response* solely to facilitate prosecution. As such, Applicant reserves the right to present new or additional claims in this *Application* that have similar or broader scope as originally filed. Applicant also reserves the right to present additional claims in a later-filed continuation application that have similar or broader scope as originally filed. Accordingly, any amendment, argument, or claim cancellation is not to be construed as abandonment or disclaimer of subject matter.

After entry of this *Response*, Claims 17-32 are pending in the *Application*. Applicant respectfully asserts that the pending claims are in condition for allowance over the references of record, and respectfully requests reconsideration of the claims in light of this submission. Applicant, accordingly, believes that the *Application* is allowable for the following reasons.

### **I. Drawing Objections**

In the *Office Action*, the *Drawings* are objected to because the "drogue anchors" are not depicted. The attached *Replacement Sheet* corrects this deficiency by providing a drogue anchor as the element 26a in FIG. 5. Applicant respectfully asserts that the *Replacement Sheet* does not add new matter to the *Application* because support for the drogue anchor (26a) can be found at least in ¶ 0068 of the *Specification* as published.

### **II. Overview of the Rejections under 35 U.S.C. §102 and 103**

In the *Office Action*, Claims 17-32 are rejected under 35 U.S.C. § 102(b) and 103(a). Claims 17-30 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 3,237,414 to Straub et al. ("Straub"). Claims 17-18 and 20-30 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 3,503,512 to Desty et al. ("Desty"). Claims 17-30 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Straub. Claims 17 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over

Desty. Claims 31-32 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Desty and Straub in view of U.S. Patent Application No. 2002/0085883 to Meyers et al. (“Meyers”). Claims 17-32 as amended are patentable because the cited references do not teach or suggest *all the claim features*. Further, the features recited in Claims 17-32 are not a predictable use of the combined teachings of the cited references.

***A. Claims 17-30 Are Patentable Over Desty***

Claim 17 is rejected under 35 U.S.C. § 102(b) and 103(a) as allegedly being anticipated by and unpatentable over Desty. Claim 17 as amended, however, is patentable over Desty because it recites features that are not disclosed in or a predictable result of the cited reference.

Claim 17 as amended recites a deployable apparatus for attenuating wave height having a buoyant or semi-buoyant upper surface member and an array of shaped drag inducing elements disposed on the underside of the upper surface member, the apparatus disposed lengthwise parallel to the wave propagation direction. (See Claim 17 for exact language).

Desty fails to disclose each and every element recited in Claim 17. The basic structure of Desty’s boom is an air containing upper chamber (10 in Figure 2) connected to a water containing lower chamber (11 in Figure 2) arranged so that the air chamber is above the water surface and the water chamber is below the water surface. In variations, a plurality of air chambers and/or water chambers may be used, as in Figures 3 and 4.

Desty’s boom is designed for containing the spread of oil slicks. Consequently, to minimize the spread of oil along the water’s surface, the drag inducing elements are oriented to impede the flow of waves propagating perpendicular to the length of the boom and striking its side. This perpendicular orientation is shown in Figures 3 and 4 where the description discusses the wave fronts passing over the wedge shaped series of air tubes 10a to 10e. Clearly, Desty fails to disclose an apparatus deployable lengthwise parallel to the propagation direction of waves and having an array of drag reducing elements to reduce wave height. Therefore, Claim 17 is not anticipated by Desty because the reference fails to disclose each and every recited element.

Claim 29 recites all of the limitations of Claim 17 along with additional limitations. Consequently, Claim 29 is not anticipated by Desty for at least the same reasons as Claim 17 discussed above.

Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Desty. In the *Office Action*, the Examiner indicates that Figure 4 of Desty discloses the limitations recited in

Claim 19. Figure 4 does not cure Desty's defects with respect to the limitations recited in Claim 17, as discussed above. Therefore, Claim 17 is patentable over Desty because the reference fails to teach or suggest each and every recited element.

For at least these reasons, Desty fails to disclose, teach or suggest each and every feature of Claims 17 and 29. Thus, Applicant respectfully submits that Claims 17 and 29 are patentable over Desty, and are in condition for allowance. Claims 18-28 and 30 are also believed to be in condition for allowance at least due to their dependence upon Claims 17 and 29, and further features defined therein.

***B. Claims 17-30 Are Patentable Over Straub***

Claim 17 is rejected under 35 U.S.C. § 102(b) and 103(a) as allegedly being anticipated by and unpatentable over Straub. Claim 17 as amended, however, is patentable over Straub because it recites features that are not disclosed in or a predictable result of the cited reference.

Straub fails to disclose each and every element recited in Claim 17. The arrangement shown in Figs. 1 and 2 of Straub consists of a longitudinally extensive bag 15 filled with a wave attenuating fluid. The wave attenuating fluid may be either more or less dense than the surrounding water. In the former case, the bag is provided with a flotation mat 19 made from foam or the like, arranged *underneath* the bag 15. Straub's arrangement is clearly structurally opposite from the apparatus recited in Claim 17, because Straub's upper portion is not buoyant and the mat disposed on lower portion does not induce drag.

The arrangement shown Fig. 5 of Straub consists of a longitudinally extensive bag 15 filled with a wave attenuating fluid and air cells 21 arranged longitudinally parallel to the instant wave front. The Examiner indicates that bag 15 corresponds to the recited drag inducing elements. But the bag 15 presents an essentially smooth surface and cannot reasonably be considered to be a drag inducing element. Further, Claim 17 as amended recites an array of drag inducing elements. Clearly, a single bag cannot be interpreted to be an array of drag inducing elements. Therefore, Claim 17 is not anticipated by Straub because the reference fails to disclose each and every recited element.

Claim 29 recites all of the limitations of Claim 17 along with additional limitations. Consequently, Claim 29 is not anticipated by Straub for at least the same reasons as Claim 17 discussed above.

Claims 17 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Straub. In the *Office Action*, the Examiner indicates that the Straub could be modified to disclose each of the recited elements of Claim 19. Straub does not, however, disclose the features recited in Claims 17 and 29, as discussed above, hence the suggested modification would fail to cure Straub's defects with respect to Claims 17 and 29. Therefore, Claims 17 and 29 are patentable over Straub because the reference fails to teach or suggest each and every recited element.

For at least these reasons, Straub fails to disclose, teach or suggest each and every feature of Claims 17 and 29. Thus, Applicant respectfully submits that Claims 17 and 29 are patentable over Straub, and are in condition for allowance. Claims 18-28 and 30 are also believed to be in condition for allowance at least due to their dependence upon Claims 17 and 29, and further features defined therein.

***C. Claims 31-32 Are Patentable Over Straub and Desty in view of Meyers***

Claims 31-32 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Desty and Straub in view of Meyers. Meyers fails to cure Desty and Straub's defects with respect to Claim 17 discussed above. In particular, Meyer's discloses a deployment vehicle, but does not teach or disclose the apparatus as recited in Claim 17. Consequently, the combination of Desty, Straub, and Meyers would not result in the system as recited in Claim 31. Therefore, Claim 31 is patentable over Desty and Straub in view of Meyers because the combination of references fails to teach or disclose each and every element recited in Claim 31. Claim 32 is also believed to be in condition for allowance at least due to its dependence upon Claim 31, and further features defined therein.

**III. Fees**

This *Response* is filed within 6 months of the *Office Action*, and thus a three month extension of time fee is believed due. Applicant pays the extension of time fee via EFS-web. The amendments to the *Application* do not change the number of claims, and thus no claim fees are believed due. The Commissioner is expressly authorized, however, to charge any additional fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

### **Conclusion**

This *Response* is believed to be a complete response to the *Office Action*. Applicant respectfully asserts that all pending claims are in condition for allowance and respectfully requests allowance of this *Application* in due course. If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities remaining in the *Application* correctable by an Examiner's amendment, a telephone call to Filip Kowalewski at (404) 885-3487 is respectfully requested.

Respectfully submitted,

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**Certificate of Transmission:**

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